



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.     | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------|-------------|----------------------|---------------------|------------------|
| 09/584,142          | 05/31/2000  | Byung Cheon Lee      | K-177               | 2704             |
| 34610               | 7590        | 07/11/2005           | EXAMINER            |                  |
| FLESHNER & KIM, LLP |             |                      | HOM, SHICK C        |                  |
| P.O. BOX 221200     |             |                      | ART UNIT            |                  |
| CHANTILLY, VA 20153 |             |                      | PAPER NUMBER        |                  |

2666

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/584,142 | <b>Applicant(s)</b><br>LEE ET AL. |  |
|                              | <b>Examiner</b><br>Shick C. Hom      | <b>Art Unit</b><br>2666           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-23 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18, 19, 21-23, 25 and 28 is/are allowed.
- 6) ☒ Claim(s) 1, 13 and 26 is/are rejected.
- 7) ☒ Claim(s) 2-17 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2666

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-19, 21-23, 25-28 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 13, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Song (6,621,821).

Regarding claims 1, 13, 26:

Song discloses a method and apparatus for processing AAL2 supporting multiple virtual channels comprising: (a1) assigning a corresponding virtual path/channel information of a

Art Unit: 2666

destination to data from a plurality of AAL2 users, and multiplexing the data having the assigned virtual path/channel information into transmission ATM cells based upon the corresponding assigned virtual path/channel information, and transmitting to the corresponding destination a transmission ATM cell through one of a plurality of channels corresponding to the assigned virtual path/channel information (see col. 1 line 45 to col. 2 line 7 which recite AAL2 uses multiplexing based on ATM network servicing a plurality of subscribers on a single virtual circuit including using AAL2 CPS-PDU format for transmitting multiple channels by multiplexing the channels into one ATM connection; col. 3 line 42 to col. 4 line 6 which recite processing AAL2 cell, performing cell routing including virtual path VP routing and virtual channel VC routing; and col. 6 line 63 to col. 7 line 15 which recite assigning a VPI/VCI value depending on the cell routing information); and (b1) receiving an ATM cell through one of the plurality of channels, demultiplexing the received ATM cell based upon a corresponding virtual path/channel information assigned to the ATM cell, and transmitting the demultiplexed data to corresponding AAL2 users (see col. 3 line 42 to col. 4 line 6 which recite demultiplexing the received ATM cells according to ATM virtual circuit and virtual path connections depending on the ATM cell header and

Art Unit: 2666

output the AAL2 cell), wherein (a1), further comprises multiplexing the data from the plural AAL2 users to generate a CPS-PDU (common part sub layer-protocol data unit), and assigning a routing information to the generated CPS-PDU: and wherein the routing information includes information indicating whether a CPS-packet length is 53 bytes or 64 bytes (see col. 4 line 54 to col. 5 line 10 which recite the 24-bit AAL2 CPS-packet header comprising a 6-bit length indicator LI field which indicates that the length of the CPS-packet payload may be up to 64 bytes).

#### ***Allowable Subject Matter***

4. Claims 18-19, 21-23, 25, 28 are allowed.
5. Claims 2-12, 14-17, and 27 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.  
Lo et al. disclose method and circuit for forming an ATM cell.

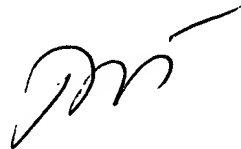
Art Unit: 2666

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANG TON  
PRIMARY EXAMINER